U.S. Appln. No.: 10/781,862

Attorney Docket No.: Q80021

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended):

A polymerizable composition comprising:

(A) a compound which causes at least one of decarboxylation and dehydration by

heat;

(B) a radical initiator;

(C) a compound having at least one ethylenically unsaturated bond; and

(D) an infrared ray absorber,

wherein the compound (A) and the radical initiator (B) are separate and distinct

compounds from each other.

2. (original): The polymerizable composition according to claim 1, wherein the

compound (A) is one which causes at least one of decarboxylation and dehydration at a

temperature of 100°C to 300°C.

3. (original): The polymerizable composition according to claim 1, wherein the

compound (A) is one having a structure capable of forming a 4 to 6-membered lactone ring, a 4

to 6-membered lactam ring or a 4 to 6-membered cyclic acid anhydride.

4. (original): The polymerizable composition according to claim 1, wherein the

compound (A) is one having at least one group represented by the following formula (I):

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$$R_1$$
 $--X-C-CO_2H$  (1)
 $R_2$ 

wherein:

X represents a divalent connection group selected from -O-, -S-, -SO<sub>2</sub>-, -NH-, -N( $\mathbb{R}^3$ )-, and -CO-,

R<sup>3</sup> represents a hydrogen atom or a monovalent substituent,

 $R^1$  and  $R^2$  each independently represents a hydrogen atom or a monovalent substituent, provided that  $R^1$  and  $R^2$ , or either one of  $R^1$  and  $R^2$  and  $R^3$  may be taken together to form a ring structure.

5. (original): The polymerizable composition according to claim 1, wherein the compound (A) is a monocarboxylic acid compound represented by the following formula (I-2):

$$R^{1}$$
 $A-X^{1}-C-CO_{2}H$ 
 $R^{2}$ 
(1-2)

wherein

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A represents an aromatic group or a heterocyclic group,

 $R^1$  and  $R^2$  each independently represents a hydrogen atom or a monovalent substituent, provided that  $R^1$  and  $R^2$ , either one of  $R^1$  and  $R^2$  and  $R^2$  and  $R^2$  and  $R^3$  and  $R^4$  and

 $X^1$  represents a divalent connection group selected from -O-, -S-, -SO<sub>2</sub>-, -NH-, -N( $\mathbb{R}^3$ )-, -CH<sub>2</sub>-, -CH( $\mathbb{R}^4$ )-, and -C( $\mathbb{R}^4$ )( $\mathbb{R}^5$ )-, and

R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> each independently represents a hydrogen atom or a monovalent substituent.

6. (original): The polymerizable composition according to claim 1, wherein the compound (A) is a compound represented by the following formula:

wherein

A represents an aromatic group or a heterocyclic group,

 $R^1$ ,  $R^2$ ,  $R^6$ ,  $R^7$  and  $R^8$  each independently represents a hydrogen atom or a monovalent substituent, provided that  $R^1$  and  $R^2$ , either one of  $R^1$  and  $R^2$  and A, or  $R^8$  and Z may be taken together to form a ring structure,

and

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Z represents a monovalent substituent.

7. (original): A polymerizable composition comprising:

(A-1) a monocarboxylic acid compound represented by the following formula (I-

- 2);
- (B) a radical initiator;
- (C) a compound having at least one ethylenically unsaturated bond; and
- (D) an infrared ray absorber:

$$R^{1}$$
 $A-X^{1}-C-CO_{2}H$ 
 $R^{2}$ 
(1-2)

wherein

A represents an aromatic group or a heterocyclic group,

 $R^1$  and  $R^2$  each independently represents a hydrogen atom or a monovalent substituent, provided that  $R^1$  and  $R^2$ , either one of  $R^1$  and  $R^2$  and  $R^2$  and  $R^2$  and  $R^3$  and  $R^4$  and

 $X^1$  represents a divalent connection group selected from -O-, -S-, -SO<sub>2</sub>-, -NH-, -N(R<sup>3</sup>)-, -CH<sub>2</sub>-, -CH(R<sup>4</sup>)-, and -C(R<sup>4</sup>)(R<sup>5</sup>)-, and

R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> each independently represents a hydrogen atom or a monovalent substituent.

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- 8. (original): The polymerizable composition according to claim 7, wherein  $X^1$  in the formula (I-2) is a divalent connection group selected from -NH-, -N( $\mathbb{R}^3$ )-, -CH<sub>2</sub>-, -CH( $\mathbb{R}^4$ )-, and -C( $\mathbb{R}^4$ )( $\mathbb{R}^5$ )-.
- 9. (original): The polymerizable composition according to claim 7, wherein  $X^1$  in the formula (I-2) is a divalent connection group selected from -NH- and -N( $\mathbb{R}^3$ )-.
- 10. (original): The polymerizable composition according to claim 7, wherein  $X^1$  in the formula (I-2) is  $-N(R^3)$ -.
- 11. (original): The polymerizable composition according to claim 7, wherein the substituent represented by  $R^3$  contains at least one of  $-CO_2$  and  $-CON(R^8)$  in its structure in which  $R^8$  represents a hydrogen atom or a monovalent substituent.
- 12. (original): The polymerizable composition according to claim 7, wherein the substituent represented by R<sup>3</sup> is represented by one of the following formulae (i) and (ii):

$$R^{6}-C-R^{7}$$
  $R^{6}-C-R^{7}$   $C-N-Z$   $C-N-Z$   $C-N^{8}$ 

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wherein,  $R^6$ ,  $R^7$  and  $R^8$  each independently represents a hydrogen atom or a monovalent substituent, Z represents a monovalent substituent, and  $R^8$  and Z may be taken together to form a ring structure.

- 13. (original): The polymerizable composition according to claim 7, wherein the monovalent substituent represented by R<sup>1</sup> and R<sup>2</sup> is a halogen atom, an optionally substituted amino group, an alkoxycarbonyl group, a hydroxyl group, an ether group, a thiol group, a thioether group, a silyl group, a nitro group, a cyano group, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, or an optionally substituted heterocyclic group.
- 14. (currently amended): A lithographic printing plate precursor comprising a support and a recording layer containing a polymerizable composition which comprises: (A) a compound which causes at least one of decarboxylation and dehydration by heat; (B) a radical initiator; (C) a compound having at least one ethylenically unsaturated bond; and (D) an infrared ray absorber,

wherein the compound (A) and the radical initiator (B) are separate and distinct compounds from each other.

15. (original): A lithographic printing plate precursor comprising a support and a recording layer containing a polymerizable composition which comprises: (A-1) a monocarboxylic acid compound represented by the following formula (I-2); (B) a radical initiator; (C) a compound having at least one ethylenically unsaturated bond; and (D) an infrared ray absorber:

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$$A - X^{1} - C - CO_{2}H$$
 $R^{2}$ 
(1 - 2)

wherein

A represents an aromatic group or a heterocyclic group,

 $R^1$  and  $R^2$  each independently represents a hydrogen atom or a monovalent substituent, provided that  $R^1$  and  $R^2$ , either one of  $R^1$  and  $R^2$  and  $R^2$  and  $R^2$  and  $R^3$  and  $R^4$  and

 $X^1$  represents a divalent connection group selected from -O-, -S-,  $-SO_2$ -, -NH-,  $-N(R^3)$ -,  $-CH_2$ -,  $-CH(R^4)$ -, and  $-C(R^4)(R^5)$ -, and

R<sup>3</sup>, R<sup>4</sup>, and R<sup>5</sup> each independently represents a hydrogen atom or a monovalent substituent.

16. (new): The polymerizable composition according to claim 1, wherein the compound (A) has a -CO<sub>2</sub>H group.

17. (new): The polymerizable composition according to claim 14, wherein the compound (A) has a -CO<sub>2</sub>H group.